

Assessing and Anticipating Skill Needs in Indonesia

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Outline

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- Labor Skill and Competency
- Labor Force Projection
- Labor Skill Assessment
- Development Strategy
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Labor Force Situation in Indonesia

In 2016,

- Indonesia has a **total workforce** of **122 million** people, of which **7.5 million** are **unemployed**.
- **42 %** of the workforce are **elementary school graduates**,
- **26 %** are **junior high school graduates**, and
- **22 %** are **senior high school graduates**.
- only **10 %** are **graduated from university**.

Labor Skills and Competency

Skills in term of Indonesia Manpower:

- **Academic skills.** (Achieved through in formal (and non-formal) education institutions)
- **Generic (or life) skills.** (Obtained through education and training institutions, on the job-training, and work experience and learning by doing)
- **Technical skills** (achieved through upper-secondary and tertiary education and training institutions, on the job-training (including non-formal learning), and work experience and learning-by-doing)

Labor Force Planning and Managing

- The institutions:
 - **The Central Bureau of Statistics (BPS)**
 - **The Ministry of Manpower and Transmigration**
- **BPS** provides **the labor force situation** in **every semester** at national level and provincial level.
- **Information** obtained from this report includes: the characteristics of
 - Employment;
 - Unemployment and underemployment; and
 - Working age population not in the labor force.
- **The Labor Force Situation Report** also contains information of the employment data according to the type of activity, labor force, the main job, and monthly average wage/salary of laborers/employees.

Data Collection System

- **The National Labor Force Survey (NLFS)**
 - In all provinces
 - Every semester.
- **National Socio-Economic Survey (NSES):** collecting data on many aspects of social and economic characteristics, such as: consumption, labor, health and household variables.

Labor Force Planning

- Planned, managed, and controlled by **The Ministry of Manpower and Transmigration**
- The umbrella: **the Regulation of the Ministry of Manpower and Transmigration Republic of Indonesia, Number Per.16 / Men / XI/ 2010.**
- The government provides **Macro Manpower Planning in Indonesia**, which contains optimal and productive labor utilization in order to support economic or social growth, **nationally, regionally and sectorally.**

Macro Manpower Planning

The macro manpower planning consists information relating to labor force such as

- (1) Labor force conditions;
- (2) Estimation and planning of labor force supply;
- (3) Estimation and planning of the need for force labor;
- (4) Estimation and planning of a balance between labor supply and labor demand;
- (5) Direction of employment policy, strategy and program.

Labor Force Projection Methods for Supply Side

Labor supply at regional level is projected using:

(1) Labor Force Participation Rate (LFPR) Method,

To calculate the quantity of labor force supply and labor force quality or labor force ready to enter the labor market through **the development approach** of LFPR with the development of population and labor at the national, provincial, and district/city level

(2) Cohort Method,

To calculate the amount of labor supply and labor quality or labor force ready to enter the labor market through **educational outreach** at every level at the national, provincial and district/city level.

(3) Other developed academic methods.

Labor Supply Projection Methods for Regional Scope

- Scope of projection:
 - Regional scope
 - Sectoral scope.
- The projection and planning of labor force for **regional scope** is calculated using three methods:

(1) Econometric method,

To estimate and plan the quantity and quality of labor force that will be required in an activity or business field through **the determination of factors affecting the creation of employment** in each sector or business field at the national, provincial, and district/city level

(2) Elasticity method,

To estimate and plan the quantity and quality of labor to be required in an activity or business field through **economic growth and employment growth** in each sector or business field at the national, provincial, and districts level

(3) Input-Output (I-O) method.

To estimate and calculate the quantity and quality of the workforce that will be required or employment in an activity or business field that the **final effective demand has an effect on the creation of employment** in various sectors or business fields at national, provincial and district/city level.

Labor Supply Projection Methods for Sectoral Scope

The need of labor force for **sectoral scope** is estimated and planned using:

(a) **Econometric method**

To estimate and calculate the amount and quality of labor that will be required in an activity or business field through the **determination of factors affecting job creation** in each sub sector at the Sectoral/Sub Sectoral of National, Sectoral/Sub Sectoral of Province, and Sectoral/Sub Sectoral of Regency/ City.

(b) **Elasticity method**

To estimate and calculate the amount and quality of labor that will be required in an activity or business field **through economic growth and employment growth** in each sub sector at the Sectoral/Sub-Sectoral of National, Sectoral / Sub Sectoral of Province, and Sectoral/Sub Sectoral of Regency/City.

Labor Balance Projection Scopes

- The balance between supply and demand for labor force is based on:

- (a) **Regional scope**

- To estimate the number and quality of labor from the balance or gap between the quantity and quality of labor supply with the need for labor or employment at the **national level, provincial level, and district/city level.**

- (b) **Sectoral scope**

- To estimate the number and quality of labor from the balance or gap between the quantity and quality of labor supply with the need for labor or employment **in the sub-sector/Sectoral of National level, Sub-Sectoral, Sectoral of province level, and Sectoral/ Sub-Sectoral District/City Level.**

Support System and Management for Labor Force Planning

Support System:

The government of Indonesia will develop **an application program** for labor force planning at the National, Provincial, District / Municipal, Sectoral / Sub-Sectoral of National level, Sectoral / Sub-Sectoral of Provincial level, and Sectoral / Sub-Sectoral of district/city Level.

Management Team

The government of Indonesia established **the manpower planning team** which consists at: National; Provinces; Regency/City; Sectoral/Sub-Sectoral of National Level; Sectoral/ Sub-Sectoral of Provincial level; and Sectoral/Sub Sectoral of District/City level.

ASSESSMENT OF SKILL NEEDS

Skill needs assessment in Indonesia conducted by:

- The government of Indonesia
- Mostly by non-government organizations funded by donors such as ILO, USAID, World Bank, ADB, etc.

Assessment of Skill Needs By Non-Government

Title	Donor	Time
INDONESIA SKILLS REPORT: Trends in Skills Demand, Gaps, and Supply in Indonesia	World Bank	May 2010
Analysis of Trends and Challenges in The Indonesian Labor Market	ADB	March 2016
Labor Demand, Productivity, and Unit Labor Costs in Manufacturing	USAID	April 2013
Indonesia: Labor market information systems and services	ILO	2015
Analysis of Skills Demand in Indonesia	USAID	March 2015
Skills for the Labor Market in Indonesia Trends in Demand, Gaps, and Supply	World Bank	2011
Technological Change, Skill Demand, and Wage Inequality in Indonesia	ADB	March 2013

An Example: World Bank Survey (2010)

- **Topics** of this survey: (1) demand for skills, (2) drivers of demand for skills, and (3) Skill mis-matches
- **Methodology**
 - The **sample** of employer and employee skill survey:
 - **473** medium and large firms (273 manufacturing and 200 services)
 - **200** employees in the manufacturing and service sector
 - The **survey focused** on the five provinces: (Riau Island, Jakarta City, West Java, East Java, and Banten)
 - **Variables** to be considered:
 - **For Manufacturing:** Employment size, Propensity to export, Propensity to import, Foreign/domestic ownership, and Skill intensity),
 - **For Services:** Employment size, Propensity to import, Propensity to export, and Skill intensity.

The Conceptual Framework



Main Findings

- Demand for skills in Indonesia
- Skill gaps
- Gaps in the quality and relevance of education and training
- Five general skill related priorities can be highlighted for Indonesia
- Priorities for secondary education
- Priorities for tertiary education
- Priorities for non-formal education and training
- Priorities for firm training

Five-Strategy for Labor Force Quality Improvement by Ministry of Manpower and Transmigration

- 1. The programs for improvement will be made bigger.** Those who are at school age should be in the school, and those who are at productive age must join in vocational training.
- 2. BLKs will be reoriented with priority being placed on sectors** such as manufacturing and tourism. The training syllabus at BLKs will be based on the needs of prioritized, thriving industries.
- 3. BLKs will be revitalized**, not only by renewing equipment and buildings, but also by aligning programs with the latest educational theory.
- 4. BLKs will be rebranded.** BLKs will be transformed into BLK-Pros, which do not only focus on creating experts such as mobile phone repairers, but also on smartphone production skills.
- 5. The private sector parties** will be asked to invest in the training centers and to jointly manage them, revitalizing the underperformed ones.

CONCLUSION

1. There are three **skills** which the industry looks for, there are: **Academic skills, Generic (or life) skills, and Technical skills (skills associated with one's profession)**. The Government of Indonesia put high intension on the improvement of life skill which we called "**Mental Revolution**". In order to accommodate skills in the labor force, the Government of Indonesia has established **National Qualification Framework (NQF)**.
2. **Assessment of skill needs** for mid/long-term at macroeconomic level in Indonesia is used **the elasticity method** which is used for estimating and calculating the amount and quality of labor that will be required in an activity or business field through economic growth and employment growth in each sub sector at the Sectoral / Sub-Sectoral of National Level, Sectoral / Sub Sectoral of Provincial level, and Sectoral / Sub Sectoral of Regency / City level.
3. **Methods/models** which are used for the input of information on macroeconomic forecasting and (sectoral) employment projections are **Econometrics Method** and **Input-output Method**.
4. The **skill needs assessment method** includes evaluation of **total demand**.

CONCLUSION

5. The **projection method** considers **the supply side and balance (interaction between supply and demand)**.
6. The **factor** to be considered for the projections includes **socioeconomic conditions**.
7. **Indonesia adopt the ISCED and ISCO classification** at different stages of the skills assessment.
8. The **critical occupation** in the selected industry subsector is **industry with digital based (automated industry)**. The occupations relation with qualifications is reflected in National Qualification Framework. Based on the desk survey, it showed that the curriculum and training programs do not highly contribute to the skill requirements.
9. Labor force data in Indonesia is managed and updated by The Central Bureau of Statistics (BPS). Labor force data which are available in BPS include **time series data by industry sector** (output, employment, average earnings, hours worked), **time series data on demography and labor force** by age and gender, and **data on employment structure by occupation and formal qualification**.
10. **Skills assessment were mostly implemented by non-government organizations**. The survey results provide many kind of output, such as, but not limited to, demand for skills, drivers of demand for skills, and Skill mis-matches.

CONCLUSION

11. **There is no regular period for the skills assessment**, but the BPS conducts labor force situation in every semester.
12. The **mechanism of the skills assessment** is stated in **The regulation of the Ministry of Manpower and Transmigration**.
13. The **skills assessment** is used for the **governments** at national, provincial, and district level, and also for **the education and training institutions**, and **industry/company** as well.
14. The **skills assessment** is conducted by **the government** especially by BPS and The ministry of Manpower and Transmigration, and mostly by **non-government organizations**.
15. The **skills assessment work** and the necessary data which providing by the government are **paid by the government**. While for **non-government organization** is paid by **donors**.
16. **Recommendation:**
 - The methodology for skill assessment **should be standardized** so that the synchronization for regional level can be conducted.
 - The **ASEAN Qualification Framework (AQF)** is required to be established such that a labor force has the standard qualification level.
 - For Asia Pacific Level: To establish **Asia Pacific Labor Bureau** and it has branch in every country which its main roles are (1) to do assessment of skill needs in its country, (2) to determine the strategic to improve the quality of human development, and (3) to formulate the Asia-Pacific Qualification Framework (APQF).

Thank You